

Maternal mortality: an historical audit

THE use of statistics to assess standards of care has a much longer history in obstetrics than any other branch of medicine. Today, as everyone knows, maternal deaths are so rare that the relevant statistic is perinatal mortality.¹ From the eighteenth century until the 1930s, however, it was maternal mortality, expressed as the number of deaths per 1,000 deliveries, or per 1,000 live births. But childbirth, as William Farr constantly pointed out, is physiological process.² A maternal death should always be a rare event. There is no recorded series in Britain of the maternal death rate of unattended deliveries — that is, deliveries in the absence of midwife or doctor — but it can be estimated that even for women living under the worst conditions of urban poverty in London during the late eighteenth and early nineteenth centuries at least 95 per cent of unattended deliveries, and probably between 97 and 98 per cent, would have resulted in a live mother if not a live baby.³ Variations in this base-line figure would be determined by factors such as the mother's health in childhood and in pregnancy, her age and parity, and the environment of the delivery. With this as a starting point, one would expect the graph of maternal mortality from the mid-eighteenth century (when medical practitioners were beginning to undertake obstetric care as a matter of course) to the 1930s (when sulphonamides led to a sudden fall in deaths from puerperal sepsis) would show a significant well-marked decline. Better medical education, greater experience, the introduction of anaesthetics and above all antisepsis would be the medical component, while improvements in sanitation, diet and housing would be the social component in a reduction of maternal mortality. But the extraordinary fact is that between 1800 and 1930 there was remarkably little change. Deaths in childbirth in England and Wales were first recorded by the Registrar General in 1847. The maternal mortality rate was 4.6 per 1,000 in the five-year periods 1856–60 and 1896–1900, and again in 1934. The graph between 1850 and 1930 was close to a straight line, the highest quinquennial rate in the whole period of 80 years being 5.4 and the lowest 3.7.⁴ Even earlier, between 1780 and 1850, a series of published statistics of midwifery in private and dispensary practice showed that maternal mortality rates of between 1 and 6 per 1,000, and even below 1, could be achieved.⁵

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There are, it must be allowed, certain difficulties in interpreting some of these early statistics, but, taken together, the general conclusion that the rate was often as low in 1800 or 1830 as in 1930 cannot reasonably be doubted. The failure to achieve a reduction in maternal mortality was rediscovered with shocked surprise at regular intervals between 1870 and 1930. William Farr in his series of vivid reports asked in 1875 'How long is this sacrifice going on?' and in 1876 he wrote of a 'deep, dark and continuous stream of mortality'.⁶ The details of the picture were complex. If in the 1870s you drew a line from the Severn to the Tees almost every county in the north and west of England had an above average maternal mortality, while those to the south and east were below the average; the division was unusually clear cut. More confusing was the distribution of maternal mortality rates accountable to puerperal sepsis in the districts of London. In London in 1898, Hampstead and Islington had very high rates, Rotherhithe and Bermondsey very low; St James, Kensington and Chelsea had higher rates than St George-in-the-East, Lambeth and Whitechapel. The writer who drew attention to this failed to realize, or suppressed, the possible connection between high rates of puerperal fever in London and prosperous areas where there were high rates of deliveries by medical practitioners rather than midwives.⁷

Few events in medical practice are as disturbing and tragic as the death of a mother in childbirth. Faced with a mortality rate which refused to fall, blame and anger spurted out in all directions, most of it landing on 'ignorant untrained midwives' (hence the Midwives Act of 1902) and general practitioners, who were roundly accused of 'the ridiculous parody which in many practitioners' hands stands for the use of antiseptics'.⁸

In 1898, Dr Elizabeth Garrett Anderson took the blame a stage further back. She blamed the teaching hospitals and the examiners:

'When they recognize that a sound and extensive knowledge of practical midwifery is infinitely more important to a practitioner than a minute acquaintance with organic chemistry and the refinements of physiology there will be a chance of improvement, but not till then ... If every medical student were compelled to spend six months in acquiring skill in midwifery, the puerperal mortality all over the country would probably approach that which I think it is at the present moment in the London maternity charities, i.e. about 1 in 500'.⁹

Obstetrics was, and many would say still is, the poor relation of medicine, surgery, pathology and the preclinical sciences; a mere 'extra' to be fitted in. To almost everyone it seemed that the fault was poor professional care and the remedy better training. With hindsight, however, it seems likely that poor standards were only partially responsible. With crude anaesthetics, no blood transfusion or antibiotics and with a high incidence of toxæmia, improvements in medical care could only have played a limited part. Of greater importance, one suspects, was the poor standard of health of the labouring classes up to and including the 1930s. In this, as in other problems connected with urban poverty, the relative importance of the failings of medicine and poor social conditions is very difficult to unravel. Moreover, the history of maternal mortality seems to be unusually full of curious anomalies. But it is startling to realize that when people aged 50 years or over today who came from a working-class background were born, the risk to their mothers was to all intents and purposes the same as it was at the time of the battle of Waterloo.

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References and Notes

1. In 1982 the perinatal mortality rate was 11.2 per 1,000 total births. The maternal mortality rate was 11.9 per 100,000 total births or 0.119 per 1,000: *On the State of the Public Health for the year 1982*. London: HMSO, 1983.
2. Farr W. *Report of the Registrar General on Births, Deaths and Marriages*. p241. 1876
3. This estimate is based on the reports of the midwifery department of the Westminster General Dispensary by: Bland R. *Philos Trans R Soc Lond* 1781; 71: 355-71. Granville AB. *Lond Med Phys J* 1822; 47: 283-288. *Transactions of the Obstetrical Society of London* 1860; 2: 139-196.
4. Alterations in the classification of diseases in 1874 and 1911 means that the statistics throughout the period 1850 to 1930 are not strictly comparable. Nevertheless, the differences introduced through these alterations were of minimal significance. Those of 1911 tended to make the mortality rate after 1911 look more favourable rather than less compared to the earlier periods.
5. See *inter al*: Merriman S. *A Synopsis of the various kinds of difficult parturition*. London: Callow, 1814. Ramsbotham F. Report of the Eastern District of the Royal Maternity Charity. *Lond Med Gaz, new series* 1843/44; 2: 619-623. Dunn R. On the statistics of midwifery from the records of private practice. *Trans Obstet Soc Lond* 1859/60; 1: 279-297.
6. *Report of the Registrar General*. 1875 and 1876.
7. Cullingworth CJ. Inaugural address on the undiminished mortality from puerperal fever in England and Wales. *Trans Obstet Soc Lond* 1898; 39: 91-114.
8. Williams W. *Deaths in childbed: a preventable mortality*, the Milroy lectures delivered at the Royal College of Physicians, 1904. London: H.K.Lewis, 1904. See also: Munro Kerr JM. *Maternal mortality and morbidity*, Edinburgh: E. and S. Livingstone, 1933.
9. Garrett Anderson E. Deaths in childbirth. (Letter.) *Br Med J* 1898; 2: 927.

The Irish College of General Practitioners

FOR almost as long as I can remember many of us have felt the need for an Irish college in the Republic. The need was, and is, self-evident and relates to the Republic being an independent sovereign state. The Royal College has not been in a position to represent the academic needs of general practice in Ireland in a way that was perceived as acceptable by colleagues in other disciplines, government and most recently by the Medical Council.

The great stumbling block has been the fear that such a small country (the population of the Republic of Ireland is a little over three million), with so relatively few general practitioners could not support an independent college. We are now convinced that it can. This confidence, in order to be justified, requires the recruitment of a majority of those in active practice to the new college. That this should be possible is largely due to the existence and achievement of the Royal College.

The Republic of Ireland and the United Kingdom are tied together by both geography and history, and until 1978 the General Medical Council retained responsibility for the standards of medical education in the whole of Ireland. It was therefore not surprising that John Hunt approached general practitioners in Ireland who might be

interested in a new college. Since that time, the Royal College has had a considerable and growing influence on Irish general practice. In part this influence has been direct and has been mediated through Irish Council and the faculties, in part it has been indirect and has been mediated through the establishment of vocational training, College publications and the slow growth of academic departments. A growing number of young doctors, mostly vocationally trained, have sat and passed the membership examination. All these things have helped to create a new sense of confidence within general practice, a confidence which finds its expression in the Irish College of General Practitioners, which was publicly launched in Dublin on 28 May 1984.

The Irish College owes its existence to a relatively small number of people. In the early stages, John Horder and Alastair Donald provided the encouragement, support and advice which was so badly needed. More recently, a steering committee was formed under the auspices of the Irish Institute of General Practice. This committee represented the Royal College in Ireland and the medical organizations. The Royal College has provided continuing and most valuable support through its officers, and